



Nutrition Environment Surrounding Three Open Campus Albuquerque High Schools

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NEMS Project Review

- Identify 5 food establishments within a 1/2 mile radius of Cibola, Manzano, & Highland high schools.
- Classify food establishments.
- Measure the types, cost, quality and availability of healthful options.
- Identify risk and/or protective factors for student health.

Semester Overview

- IRB
- Identify survey sites
- Surveys
- Data Analysis

IRB

- Exempt Determination Form
 - Exemption screening questions
 - Exempt Research Categories
- Protocol
 - Detailed explanation of: project goals, design and methods, data analysis, participants, data storage and risks

Methods

- Setting: Three selected open campus high schools.
- Participants: The closest five fast-food or fast-casual food outlets (within a half-mile radius of the schools)
- Measurement of each environment will be accomplished using the Nutrition Environment Measures Surveys (NEMS) to quantify and qualify each food outlet.

Selection of Participants

Food Outlets were selected by:

- Surveying each area and identifying restaurants and convenience stores in the areas based on inclusion criteria.
- Observations of young patron traffic.
- Observing convenient proximity to high schools

Enumeration of Food Outlets

- Coding system to categorize, organize, I.D.
- Eight digits, such as **01-1-01-000**
- **01**- school area
- **1**-Type of food outlet 1=store, 2=restaurant
- **01**-Type of store/restaurant:

Store: 01=grocery, 02=convenience, 03=other

Restaurant: 01=sit down, 02=fast food, 03=other

- **000** - Individual I.D. number

NEMS Surveys

NEMS-R Restaurant Measure

- Healthy food options: main dishes, entrees and salads
- Availability of non-fried vegetables and fruits without added sugar
- Whole grain bread and baked chips,
- Beverages
- Children's menus
- Signage and promotions
- Facilitators and barriers to healthy eating
- Pricing

NEMS Surveys

Nems-S Store Measure

- milk
- fruit
- vegetables
- ground beef
- hot dogs
- frozen dinners
- baked goods
- beverages
- bread
- baked chips
- cereal

Data Collection & Analysis

- Each food outlet will be assigned an anonymous code.
- Surveys will be completed, and each food outlet will receive an overall score.
- Data (including food outlet scores and individual variables) will be entered into the NEMS spreadsheets and converted to SPSS for analysis.

Data Analysis

- Data will be plotted into a frequency distribution.
- Descriptive statistics for:
 - The food environment surrounding each school, and
 - The overall high school food environment in Albuquerque.
- Inferential statistics may include multiple statistical procedures:
 - MANOVA to look at multiple dependent variables.
 - Possible correlational studies.

Conclusion:

Possible Uses for Research

- Information for analyzing and characterizing the broader scope of the high school food environment and food opportunities for open campus high school students
- Foundation for further research on high school food environments, food availability, and possible associations to health outcomes, such as obesity
- A starting point for further research to possibly inform school food policies such as regulations on vending machines, food sold in school stores and a la carte vendors; as well as times and places students can buy and eat food